AMENDMENTS TO THE CLAIMS

This listing will replace all prior versions, and listings, of claims, in the application:

Listing of Claims:

Claim 1 (currently amended): A device for ~~sealing or tightly~~ closing ~~bottles (1) or similar~~ containers having an opening with a rim, ~~characterized in that it has at least two elements that are stably held together, i.e.~~ the device comprising:

a rigid capsule (3)[[,]] having ~~a hollow revolution shape, that is~~ a cup shape with a closed bottom and an open end, ~~resulting from a hollow cylinder or truncated cone with a closed bottom, which is made from metal, plastic or other material having similar properties,~~ and

an extensible ~~plastic~~ diaphragm (2), ~~which is permanently~~ subtended ~~over the rim of the open side of the rigid capsule (3), or preferably subtended perpendicular to the axis of the cylinder or truncated cone in any suitable manner~~ in a plane situated between the closed bottom and the ~~opening~~ open end of the capsule (3),

~~. As the device is fitted on the opening of the container (1), said~~ wherein the diaphragm is stretched and caused to tightly adhere against the ~~edge~~ rim of the opening when the capsule and the rim of the opening are mated, and

~~. Moreover, the cylinder or truncated cone shaped wall hasmeans (101) for coupling it, by deformation or screw fastening, to cooperating radial ridges or external threads of the end portion of~~ wherein the capsule cooperates with the rim of the opening of the container (1), ~~andseal means (4) interposed between the closed bottom of the capsule and the edge of the opening of the container (1)~~.

Claim 2 (currently amended): [[A]] The device as claimed in claim 1, ~~characterized in that~~ wherein the diaphragm ~~may be~~ is permanently secured to the rigid ~~cup-shaped element, i.e. the~~ capsule (3), ~~in several different manners, i.e. either by gluing or by other chemical and/or physical adhesion arrangements~~.

Claim 3 (currently amended): [[A]] The device as claimed in claim 1 ~~or 2~~, ~~characterized in that~~ wherein the diaphragm (2) ~~may be~~ is secured to the rigid ~~cup-shaped element, i.e. the~~ capsule (3)[[,]] by ~~directly attaching~~ attaching it to the edge ~~that surrounds the opening of the cup-shaped element, i.e.~~ of the open end of the capsule (3).

Claim 4 (currently amended): [[A]] The device as claimed in claim 3, ~~characterized in that the edge that surrounds the opening of the rigid cup-shaped element, i.e.~~ wherein the open end of the capsule (3) further comprises ~~may be widened in such a manner as to form an enlarged and/or thickened portion or~~ a flange~~, which provides a~~ providing for a wider surface ~~for~~ of adhesion [[of]] for the diaphragm (2).

Claim 5 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that~~ claim 1, wherein the diaphragm (2) extends ~~radially beyond said edge and forms~~ beyond the open end of the capsule (3) to form an annular peripheral surface, which is ~~designed to adhere against the end portion of the outer cylindrical or truncated cone-shaped wall of the cup-shaped element, i.e. the capsule (3), adjacent to the open end thereof~~ attached to a portion of the outer wall of the capsule (3).

Claim 6 (currently amended): [[A]] The device as claimed in claim 5, ~~characterized in that~~ wherein the annular peripheral ~~band~~ surface of the diaphragm (2) ~~tightly adheres~~ is retained in position against the outer ~~surface of the cup-shaped element, i.e.~~ wall of the capsule (3)~~, thanks to the natural resiliency properties~~ by the elastic properties of the diaphragm (2).

Claim 7 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that the plastic elastomeric diaphragm (2) is positioned on~~ claim 5, further comprising a bushing having open opposite ends, wherein the bushing has an inner diameter substantially equal to the outer diameter of the capsule (3), wherein the capsule (3) is partially inserted within the [[a]] bushing ~~(11) or a cylindrical ring nut, which is open on both end sides and has such an inside diameter that, when the diaphragm (2) is subtended over the opening of the cup-shaped element, i.e. the rigid capsule (3), with the annular peripheral band of said diaphragm (2) overlapping to a certain extent the outer surface of the cylindrical wall of the cup-shaped element, or the capsule (3), the bushing (11) or ring nut lies, thanks to an elastic and/or shape fitting arrangement, over the rigid cup-shaped element (3), along a portion of its axial extension, from the end of the opening of the cup-shaped element (3), thereby compressing the peripheral band~~ and wherein the annular peripheral surface of the diaphragm (2) is compressed against the outer surface of the ~~cylindrical wall of the rigid cup-shaped element~~ capsule (3).

Claim 8 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that the ratio of the diameter of the rigid cup-shaped element (3) to the diameter of the bushing (13) or ring nut is such that the~~ claim 7, wherein the bushing

~~(13)~~ has an outer diameter substantially equal to the inner diameter of the capsule (3), and wherein the bushing penetrates the ~~inner surface of the peripheral wall of the cup-like element~~ open end of the capsule (3)~~, along a~~ for a certain axial depth~~, thereby compressing~~ and compresses the annular peripheral ~~band~~ surface of the diaphragm (2) ~~which overlaps the outer surface of the bushing (13) or ring nut~~ against the inner surface of the ~~cylindrical wall of the rigid cup-shaped element~~ capsule (3).

Claim 9 (currently amended): [[A]] The device as claimed in claim 7 ~~or 8, characterized in that~~, wherein the annular peripheral surface may be further affixed to the capsule (3) by a secondary fastening process, and wherein the secondary fastening process is subsequent welding or simultaneous gluing ~~may be also provided~~.

Claim 10 (currently amended): [[A]] The device as claimed in ~~one or more of claims 7 to 9, characterized in that~~ claim 7, wherein the bushing ~~(11) or (13) or ring nut may have~~ comprises a lead-in surface ~~surfaces, which may consist, if the bushing or ring nut is designed to be force fitted in the cup-shaped element (3) of a conical or~~ providing a rounded tapering at the point of ~~the~~ insertion ~~end~~ of the capsule (3).

Claim 11 (currently amended): [[A]] The device as claimed in ~~one or more of claims 7 to 10, characterized in that~~ claim 7, wherein the diaphragm (2) is ~~embedded in~~ positioned in the inner portion of the assembly of the rigid cup-shaped element (3) and the bushing ~~(13) or ring nut~~.

Claim 12 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that~~ claim 7, wherein the bushing (11) ~~or ring nut~~ and the ~~rigid cup-shaped element~~ capsule (3) are connected by ~~means of~~ coupling radial ridges ~~of one of the two elements, cooperating with~~ and radial recesses ~~of the other element, which radial recesses may be provided originally or formed by deformation by the radial ridges of the other part, upon coupling thereof~~.

Claim 13 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that, in combination with the rigid cup-shaped element (3), an element (82) is provided, which is made of an elastomeric material, and also has a cup shape, and whose~~ claim 1, wherein the diaphragm is cup-shaped and has a cylindrical wall [[is]] designed to come in contact with the inner surface of the ~~cylindrical or truncated-cone shaped wall of the rigid cup-shaped element~~ capsule (3), said ~~rigid cup-shaped element~~ capsule (3)

being axially deeper than the ~~elastomeric cup-shaped element (82) which is to act as an extensible~~ diaphragm.

Claim 14 (currently amended): [[A]] The device as claimed in claim 13, ~~characterized in that the extensible plastic element (82), preferably made by injection molding, and having the shape of a cup with~~ wherein the diaphragm has a peripheral rim~~, i.e. a thicker and/or stiffer ring, is shaped like a hollow closed-bottom body of revolution having an appropriate thickness~~.

Claim 15 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that~~ claim 13, wherein the free edge of the ~~extensible plastic cup-shaped element (82)~~ diaphragm has ~~a stiffening flange or~~ an annular widened portion (85) extending from the its free edge, ~~of any suitable shape, and made of the same material, whereas the inside diameter of said flange or enlarged portion preferably corresponds to the inside diameter of the rigid cup-shaped element (3) minus twice the thickness of the cylindrical portion of the element (82), and the outside diameter is equal to or greater than~~ the annular widened portion being at least as wide as the outside diameter of the ~~outer cylindrical wall of the or rigid cup-shaped element~~ open end of the capsule (3)~~, and its thickness is sufficient to stiffen the edge~~.

Claim 16 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that the rigid cup-shaped element (3) has a cylindrical or substantially cylindrical or a conical or substantially conical shape and may have~~ claim 15, wherein the capsule (3) further comprises an annular seat (84) ~~for the stiffened rim (83)~~ extending from the open end and housing the annular widened portion (85) of the diaphragm.

Claim 17 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that the rigid cup-shaped element~~ claim 1, wherein the capsule (3) is made of a resilient material, and wherein the resilient material is plastic, [[or]] metal, or ~~combinations of said materials~~ a combination thereof.

Claim 18 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that the rigid cup-shaped element (3) has~~ claim 1, further comprising a sealing element (4)~~, such as a disk or the like,~~ interposed between the diaphragm (2) and the closed bottom.

Claim 19 (currently amended): [[A]] The device as claimed in claim 18, ~~characterized in that~~ wherein the sealing element is pre-fitted in the inner side of the closed bottom of the ~~rigid cup-shaped element~~ capsule (3).

Claim 20 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that~~ claim 1, wherein the ~~rigid cup-shaped element~~ capsule (3) has at least one aperture (9) formed in ~~its~~ the closed bottom, ~~which is~~ the aperture being tightly closed by a transparent wall (8) and ~~extends~~ extending over at least a portion ~~or the whole~~ of the surface of said closed bottom.

Claim 21 (currently amended): [[A]] The device as claimed in claim 20, ~~characterized in that~~ wherein the transparent wall ~~element~~ (8) for tightly closing the aperture (9) is also used as a seal and is ~~secured~~ securely connected to the capsule (3) ~~rigid cup-shaped element (3) by gluing or welding or other chemical and/or physical adhesion arrangements~~.

Claim 22 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that~~ claim 1, ~~the rigid cup-shaped element (3) has~~ wherein the rim of the opening comprises one or more retaining shoulders, the device further comprising a sealing ring attached to ~~its open edge, which is held~~ the open end of the capsule (3) and connected to the rest of the ~~rigid cup-shaped element~~ capsule (3) by a tear-off line[[,]] ~~requiring~~ that requires a predetermined breaking force[[,]] for separation from the rest of the capsule (3), ~~and provides~~ the sealing ring providing snap engagement ~~by elastic force fitting thereof on the container or by shrinking thereof on~~ with at least one retaining shoulder on the rim of the opening ~~of the container (1) by cooperating with at least one retaining shoulder situated at a predetermined axial distance from the edge of the opening of the container (1)~~.

Claim 23 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that when the rigid cup-shaped element~~ claim 1, wherein the capsule (3) is fitted on the opening of the container (1) ~~it extends to a certain extent~~ and extends beyond the ~~free edge~~ rim of the opening of the container (1) ~~thereby forming a drinking cup or glass element (301)~~ to form a cover (30) shaped like a drinking glass .

Claim 24 (currently amended): [[A]] The device as claimed in claim 23, ~~characterized in that the extension~~ wherein the cover (30) ~~of the rigid cup-shaped element (3)~~ is shaped ~~and has such a diameter that~~ to cause its free edge to substantially ~~abuts or adheres against~~ abut the outer surface of the container (1).

Claim 25 (currently amended): [[A]] The device as claimed in claim 23 ~~or 24~~, ~~characterized in that the extension~~ wherein the cover (30) is ~~made of one piece with the rigid cup-shaped element~~ and the capsule (3) are an integral piece.

Claim 26 (currently amended): [[A]] The device as claimed in claim 23 ~~or 24~~, ~~characterized in that the end portion of the skirt wall~~ wherein the cover (30)~~, associated to the rigid cup- shaped element (3)~~ has a shape (34) that is complementary to ~~that~~ the shape of ~~said rigid cup-shaped element~~ the capsule (3), ~~whereby said end portion forms a closed glass bottom that has such a size as to be~~ wherein the cover (30) is connected to the capsule (3) by a fastening process, and wherein the fastening process is force fitting, chemical adhesion, or mechanical adhesion ~~able to be force fitted and/or coupled by chemical and/or physical adhesion arrangements to the rigid cup shaped element (3)~~.

Claim 27 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims 23 to 26, characterized in that~~ claim 23, wherein the free edge of the ~~skirt wall~~ cover (30) ~~that forms the extension of the rigid cup-shaped element (3) whose shape mates the shape~~ abuts the outer surface of the container (1), and wherein at least a portion of the container (1) is covered ~~and protected~~ by a label (32) that overlaps both the container (1) and ~~partly~~ a portion of the cover ~~wall of said extension~~ (30).

Claim 28 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that~~ claim 23, wherein the cover ~~a plate, a disk (33) or similar~~ is provided ~~outside the closed bottom of the rigid cup-shaped element (3), for forming the base foot of the drinking glass (30),~~ with a base forming the base of the drinking glass shape ~~whose diameter is preferably greater than that of the rigid cup-shaped element (3)~~.

Claim 29 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that the rigid cup shaped element~~ claim 23, wherein the capsule (3) ~~has~~ further comprises a sealing end ring (36) ~~which extends all along the free edge of the open side of said rigid cup-shaped element~~ extending along the open end of the capsule (3), ~~which~~ the sealing end ring (36) [[is]] being separated from the rest of the ~~rigid cup-shaped element~~ capsule (3) by a tear-off line[[,]] requiring a predetermined breaking force to separate from the rest of the capsule (3), ~~and which~~ wherein the sealing end ring (36) is designed to engage ~~by snap engagement and/or crimping behind a continuous or discontinuous~~ with an outer radial annular shoulder (35) ~~of~~ on the rim of the container (1), ~~which~~ wherein the outer radial annular shoulder is situated at such a distance from the edge of rim of the opening that,

when the container is ~~perfectly~~ closed by the device, the sealing end ring (35) is engaged on the container, ~~whereas~~ and wherein the extension of the ~~rigid cup-shaped element~~ capsule (3) ~~that forms the~~ forming the cover (30) shaped like a drinking glass extends toward the ~~bottom~~ side of the container (1) ~~in such a shape and for such an axial length as to lie over and beyond the sealing ring (32) and as to generate such a small annular interstice with the container wall as to prevent any~~ opposite to the opening, thereby preventing access~~, by hand or other tools,~~ to the sealing end ring (35) ~~itself~~.

Claim 30 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that a drinking glass element (31) is provided, whose~~ claim 23, wherein the shape of the cover is complementary to, and can be fit over, the ~~bottom~~ side of the container (1) opposite to the opening rather than over the opening, and ~~allows it to be coupled to said bottom of the container (1) by slight elastic force fitting, the skirt wall of said drinking glass element (31) having such a length that~~ wherein a label (32) positioned over a container wall lies over at least a portion of the free edge of said cover ~~drinking glass element (31) at least along an end portion of said free edge~~.

Claim 31 (currently amended): [[A]] The device as claimed in ~~one or more of the preceding claims, characterized in that it has both a drinking glass element (30) associated to the rigid cup-shaped element (3) and a drinking glass element~~ claim 23, further comprising a second cover (31) associated to the ~~bottom~~ side of the container (1) opposite to the opening, wherein a label (32) is positioned over a container wall, and wherein the label (32) extends over at least a portion of the free edges of both covers ~~drinking glass elements being covered by the label (32) of the container~~.

Claim 33 (currently amended): A process for making a ~~metal truncated cone-shaped~~ capsule coupled with an extensible diaphragm, the capsule having a closed bottom and an open end, ~~as claimed in one or more of claims 1 to 16, characterized~~ the process comprising the steps of:

(a) firmly holding the ~~rigid cup-shaped element~~ capsule (3) ~~from the side opposite to the open side to be closed by the diaphragm (2), preferably by using an electromagnet (37) which comes in contact with the rigid cup-shaped element (3) of the capsule from the outside of the closed side thereof~~ at the closed bottom;

(b) ~~Pushing~~ pushing the ~~rigid cup-shaped element~~ capsule (3) into ~~a cylindrical hole or~~ an aperture having an appropriate diameter, ~~along the axis of said rigid cup-shaped element~~

~~(3) and/or of the cylindrical hole,~~ an extensible ~~plastic~~ diaphragm (2) being subtended over ~~the opening of said hole, in any suitable manner.~~ the aperture;

(c) ~~Stretching~~ stretching the diaphragm (2) with the ~~help of the free edge of the rigid cup-shaped element~~ open end of the capsule (3) upon penetration ~~thereof in the cylindrical hole and/or passage thereof through the cylindrical hole~~ of the capsule (3) into the aperture, ~~which~~ the diaphragm (2) ~~will take, due to its internal transverse stresses,~~ acquiring the shape of a paraboloid of revolution[[.]]; and

(d) ~~Cutting~~ cutting the diaphragm (2) ~~all around the rigid cup-shaped element (3), for instance by using a sharp annular blade (38), placed at a certain distance from the hole and behind it, by using the same pressure force of the rigid cup-shaped element on the diaphragm (2), which annular blade 38 is overhanging and integral with the inside of the cylindrical hole, whose diameter is greater than the outside diameter of the rigid cup- shaped element (3) and smaller than that of the cylindrical hole.~~ substantially around, and at a distance from, the perimeter of the open end of the capsule to provide the diaphragm (2) with a diameter larger than the open end of the capsule (3),

~~Whereas, due to the transverse resilient stresses caused by longitudinal stretching of the extensible plastic polymer,~~ wherein the cut edge ~~cut from~~ of the diaphragm (2) shrinks and wraps around the outer surface of the ~~free edge of the rigid cup-shaped element~~ open end of the capsule (3) ~~, its diameter becoming smaller than the greatest diameter of the truncated cone-shaped rigid cup-shaped element (3), and is finally~~ becoming locked in position.

Claim 34 (currently amended): A process for making a ~~composite~~ capsule coupled with an extensible diaphragm, the capsule having a closed bottom and an open end, the process comprising the steps of: ~~as claimed in claim 11, characterized in that~~

(a) causing a diaphragm disk ~~(2)~~, whose diameter is greater than the ~~inside~~ inner diameter of the capsule (3), ~~is first made to coaxially adhere by vacuum~~ to be in contact with the closed[[,]] and suitably perforated ~~bottom~~ base of a hollow cylinder (21) ~~whose inside~~, the base having a diameter [[is]] smaller than the ~~inside~~ inner diameter of the capsule (3);

(b) ~~to be later forced~~ forcing the cylinder into the capsule (3); and

(c) ~~caused~~ causing a portion of the diaphragm disk to adhere ~~thereto, by the portion of the diaphragm disk (2), which exceeds the diameter of the cylinder (21), along a cylindrical portion, next to the free edge~~ to a portion of the inner wall of the capsule (3).

Claim 35 (currently amended): [[A]] The process as claimed in claim 34, ~~characterized in that~~ wherein the hollow cylinder (21) is replaced by a hollow truncated cone having a ~~closed bottom whose smaller diameter~~ smaller base that is suitably perforated.

Claim 36 (currently amended): An apparatus ~~or tool for implementing the process as claimed in claim 34, characterized in that it consists of~~ for making a capsule coupled with an extensible diaphragm, the capsule having a closed bottom and an open end, the apparatus comprising a modular cylinder (21)~~, i.e. composed of several parts, whose outside~~ having an outer diameter [[is]] smaller than the ~~inside~~ inner diameter of the ~~capsule (3)~~ open end, said modular cylinder (21) being longitudinally divided into at least two sectors (27)~~, which have a 180° angular width, are hollow and equal, have~~, the at least two sectors being hollow and having a closed bottom~~, and may be transversely~~ wherein the at least two sectors are capable of being inserted into the open end of the capsule (3), thereby pressing the diaphragm into the capsule (3), to spread apart causing a portion of the diaphragm to adhere to the inner wall of the capsule, and to be drawn together again. ~~by pneumatic cam actuators, e.g. by pistons (28) and cylinders (28bis) appropriately arranged between the sectors (27) or by inflatable bags, whereas they may be drawn closer by suitable springs, e.g. annular springs that outwardly and inwardly surround the sectors (27) of the modular cylinder (21)~~.

Claim 37 (currently amended): [[An]] The apparatus as claimed in claim 36, ~~characterized in that each hollow sector~~ wherein the at least two sectors (27) of the cylinder (21) have an inner cavity that is maintained under vacuum, and wherein each of the at least two sectors has at least one hole in its ~~closed bottom for communication~~ base communicating with ~~its~~ the inner cavity.

Claim 38 (currently amended): [[An]] The apparatus as claimed in claim 36 ~~or 37, characterized in that it has~~, further comprising mechanical drive means that accomplish the steps of ~~grasping~~ holding the diaphragm ~~disk~~ (2), of introducing ~~it in the rigid cup-shaped element~~ the diaphragm (2) into the capsule (3), and ~~then~~ of pressing and causing adhesion of the portion ~~thereof~~ of the diaphragm (2) that exceeds the diameter of the cylinder (21) against the inner ~~cylindrical portion of the rigid cup-shaped element~~ wall of the capsule (3)~~, provided for adhesion~~.

Claim 39 (currently amended): A process for making ~~the~~ a capsule ~~as claimed in claim 11~~ coupled with an extensible diaphragm, the capsule having a closed bottom and an open end, ~~wherein~~ the process comprising the steps of:

(a) flaring the open ~~side of the rigid cup-shaped element~~ end of the capsule (3) ~~is first flared by~~ with a conical wedge (14);

(b) ~~and later flattened by~~ flattening the flared open end with a flat head cylinder (15)~~, whereas the rigid cup-shaped element~~ to cause the open end to have a flattened edge, while the capsule (3) is held ~~by vacuum (20)~~ in a correspondingly shaped housing (16)~~, and~~;

(c) laying ~~a~~ the diaphragm ~~disk~~ (2) ~~is laid on the plane of the portion that is bent at 90° with respect to the cylinder axis, in any suitable manner,~~ over the flattened edge and causing it to adhere to the flattened edge; and

(d) ~~whereupon the flattened edge, with the diaphragm (2) fitted thereon is brought back~~ returning the flattened edge to its original position prior to flaring and flattening by a first bend back step, and subsequently by a straightening process, wherein the straightening process is a ~~straightened by~~ rolling process ~~it~~ by suitable rollers 17 and counter rollers 18 ~~and/or by a~~ or coaxial compression process of conical sectors 19~~, which~~ that are connected to form a ~~sort of~~ mandrel-shaped tool.

Claim 40 (currently amended): [[A]] The process as claimed in claim ~~34 or~~ 39, ~~for mating the composite capsule as claimed in claim 11, characterized in that the steps of flaring, flattening, fitting the diaphragm disk (2) and subsequently restoring the position of the bent portion is carried out on the rectangular or trapezoidal surfaces delimited by the cuts (12) formed in the cylindrical walls~~ wherein the capsule (3) has a wall, and wherein at least a portion of the wall has a polygonal a cross-section ~~of the capsule (3), on which the diaphragm (2) adheres~~.

Claim 41 (currently amended): [[A]] The process as claimed in claim 39, ~~characterized in that~~ wherein at least one of the steps of flaring [[or]] and flattening the ~~free edge~~ open end of the capsule (3) ~~at 90°~~ is obtained by spin molding the material composing the capsule (3) ~~from a ductile metal~~.

Claim 42 (currently amended): [[A]] The process as claimed in claim 41, ~~characterized in that~~ wherein the capsule is made of metal, and wherein, prior to spin molding, a metal pellet is introduced in an appropriate openable mold and forced by spinning to spread through the ~~whole space in the~~ entire mold cavity ~~/ the steps as claimed in claim 41 being carried out later on~~.

Claim 43 (new): The process as claimed in claim 33, wherein the capsule is held at the closed bottom by an electromagnet.